Loneliness and Self-Esteem as Predictors of Internet Addiction in Adolescents

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Abstract — Internet addiction in adolescents is influenced by various factors, both of them are loneliness and self-esteem. Therefore, this study aims to examine the loneliness and price to internet addiction in adolescents. The subjects in this study were 35 adolescents (23 female students and 12 male students) who are still in Junior High School (SMP) and Senior High School (SMA) in Kota Ternate at the age of 14-17 years old. The sampling technique used was the simple random sampling technique. The data was collected by using questionnaires using scales as the instrument. The instrument reliability technique in this study was the Cronbach Alpha. The data were analyzed using the multiple regression technique. The results show that loneliness and self-esteem could predict Internet addiction in adolescents.

Keyword — internet addiction, loneliness, self-esteem, adolescents

I. INTRODUCTION

The Internet in this era brings huge changes throughout the world, especially for adolescents who live in the information era, so they rely more on the Internet for various purposes [32]. There are three reasons for the Internet that benefit to someone’s social connection. First, it could reduce the use of transaction time in daily life such as online shopping that helps to facilitate the flexibility of time, so we may use that time with our family, friends, and colleagues. Second, it is for various professions such as journalism, research, computer programming, and online marketing in which workers use the Internet as a tool for their work which helps them to build flexible a home-based office. Third, it is as a communication tool that more economical than the others, so it is more efficient to contact the family, friends, and colleagues. Therefore, the use of the Internet has a positive effect to the individuals’ welfare [27].

In general, the prevalence of the Internet use in adolescents today at the age of 12-17 years old is 80 to 90 percent. They use the Internet to open Facebook, Twitter, Blackberry Messenger, Skype, and Plurk that have been used by many people in social networks [11], [31], [40]. Several previous studies have indicated that the adaptation time of adolescents at the age of 13-14 years old will be inclined in using social networks to socialize with friends or family even to look for friends [11], [21].

A large number of the Internet uses allows not only to provide positive effects for psychological welfare but also to give negative effects such as addiction. Addiction is when people cannot choose freely whether to stop or continue a behavior which means loss of control, so as to harm themselves [35]. Some previous researches also explain that the characteristics of people who experience addiction are the excessive use of the Internet, cannot be controlled, and unlimited time to use it, so this disrupts the lives of those people. In addition, Internet addiction causes the difficulty in adjusting to the environment, which according to the clinical aspect it is disruptive and the source of stress [14], [38].

For adolescents, the Internet is as a negative effect when they experience Internet addiction. According to some previous studies, there are adverse effects on adolescents such as psychological well-being disorders, lack of interactions between family and friends, poor academic performance that proved by the decline of their scores, and barriers to the achievement of psychological development tasks and disruptions in their life such as isolation [16], [19], [24]. This underlies reasons to review the variables that affect the Internet addiction that causes adverse effects on adolescents. Many factors that cause Internet addiction relate to low self-control [3], [9], [25], depression and loneliness [2], [7], [8], [23], [25], self-esteem [1], [2], [17], [30], and life satisfaction [2], [6]. However, there are two main factors as the focus in this research namely loneliness and self-esteem.

Based on the literature review and previous research that have been described above, the purpose of this study is to test the influence of loneliness and self-esteem of Internet addiction in adolescents. The importance of this research is to provide a psychological illustration of Internet addiction that is thought to be caused by loneliness and self-esteem, so it may provide appropriate intervention on the issue. The hypothesis of this study is the existence of
loneliness and self-esteem as a predictor of Internet addiction in adolescents.

A. Internet Addiction and Its Correlation with Loneliness and Self Esteem

Someone who gets addicted to the Internet can be seen from four aspects [42] as follow:

a) excessive use of the Internet that often relates to the loss of time awareness or ignoring basic needs, b) the symptom of afraid to not use the Internet by feeling fear, nervous, and depression, c) tolerance: the need for better computer and more software, and the excessive use of time, d) negative impacts of argument, lies, poor performance, social isolation, and fatigue.

Loneliness according to some studies indicates that loneliness is considered as social isolation that serves as an important contributor in psychological improvement and especially about health problems. Adolescents’ loneliness is considered as a mental disorder. A study which investigates that loneliness could happen several times and to stages of life causes negative feeling and illogical thought. These results indicate that feelings of loneliness are more common happen to women than men [13], [28].

Loneliness is the feeling of a person who does not feel a sense of satisfaction in his/her social relationship accompanied by symptoms of psychological pressure associated with the absence of something or the feeling of loss and the feeling of deprivation when a person does not get the expected social relationship [3]. Several dimensions of loneliness include a) the duration of loneliness, the lack of self-confidence in new situations and the length of it, b) social loneliness versus emotional loneliness, the absence of a complementary figure such as parents or friends. On the contrary, social loneliness occurs when a person does not have satisfaction and is not accepted in the social environment that makes in his/her social relationship boring [26].

Both dimensions of loneliness could give an illustration to a person who gets loneliness. Therefore, when a person is lonely, she/he often relates to Internet addiction. Some research finds that loneliness is the second factor that often relates to PIU (Problematic Internet Use) which is another term of Internet addiction. Although the beginning of the theory said that the use of the Internet is caused by users who feel lonely by doing social interaction via the Internet, but another theory appears as the reverse from the former description. The latest says that individuals who feel lonely spend more time using the Internet to reduce their loneliness. Therefore, the use of the Internet is strongly related to loneliness and increasingly excessive use of the internet [2], [32].

Other supporting studies confirm the existence of psychological disorders such as depression and shyness, included loneliness as the main factor of this Internet addition. Besides, there is also social anxiety and dependence which is an important etiological element of the Internet usage disorder [15], [36]. Therefore, people who feel depressed and lonely can be more easily exposed to Internet addiction. Furthermore, research from [15] shows the relationship between loneliness and embarrassment with Problematic Internet Use in adolescents at the age of 14-15. The result shows the relationship between these two variables with Problematic Internet Use with loneliness as a mediator in the relationship.

Besides loneliness, Internet addiction could also be caused by self-esteem in adolescents [1], [30]. Self-esteem is an experience and a prerequisite to stay alive, in other hands, every individual believes that he/she has right to be happy and deserve to enjoy the success he/she get from the challenges [4], [7]. Individuals who have high self-esteem are those who have a living awareness, self-concept, self-responsibility, self-assertiveness, a purpose in life, and personal integrity. However, when a person does not have those six pillars, his/her self-esteem will be low [4].

In some previous studies, it has shown that adolescents with low self-esteem tend to spend time in social media networks rather than those with high self-esteem. In other words, a person with low self-esteem, especially in women, could cause someone addicted to the Internet [1], [12], [23]. To know how one’s self-esteem can be seen from two aspects [5]: sense of personal efficacy which means an individual believes in choosing, judging, thinking and taking a decision and confidence in oneself; and sense of personal worth which means an individual believes in the values which are believed have positive attitude toward the right to live happily.

II. RESEARCH METHOD

The research approach used in this research is a quantitative approach which is ex post facto research. The research was conducted in Ternate. The subjects were 35 adolescents (12 boys and 23 girls). Subjects in this study were adolescents aged 14-17 years who are in the moment studying in Junior High School (SMP) and Senior High School (SMA) because at these ages the Internet users are at the highest. The sampling technique used was the simple random sampling technique. The instrument validity technique used was the content validity and the internal consistency while to test the reliability, the Cronbach alpha technique formula was applied. The Internet addiction scale has the alpha Cronbach value at 0.828, the loneliness scale is at 0.691, and the self-esteem is at 0.643. The data analysis technique used is multiple regression analysis.

Data collection techniques in this study were questionnaires. The research instruments used a
scale consist of 3 scales: the Internet addiction scale, the loneliness scale, and the self-esteem scale. The internet addiction scale consists of 25 statement items, the second scale is the loneliness scale consisting of 31 statement items, and the self-esteem scale consists of 46 statement items. The first scale, internet addiction, which refers to Young and Abreu Theory (2011) consists of 4 aspects: excessive use, withdrawal symptoms, tolerance, and negative impact, the loneliness scale refers to Peplau Theory (1988) which consists of 3 aspects: duration, social loneliness, and emotional loneliness, and the self-esteem scale refers to Branden’s Theory (1994) which consists of a sense of personal efficacy and a sense of personal worth. This study also asked some questions to find out how long the subjects use the internet in a day and at what age the subjects start using the internet so that the percentage of both questions could be shown.

III. RESULT AND DISCUSSION

A. Result

Diagram 1 presents the time used by adolescents accessing the Internet. The highest time of the Internet use in adolescents is 54% about 5-7 hours a day while 29% of them access the Internet for 7-8 hours a day and 17% of them access the Internet for 9-12 hours a day. Diagram 2 describes the age of the subjects starting to use the Internet. The results are that 71% of adolescents have known to access the Internet at the age of 11-15, at the age 7-10 by 29% and at the age of 16-17 by 0%. It can be concluded that most of them started to use the Internet at the age of 11-15.

Table 1 shows descriptive statistics containing mean, standard deviation, and total number of subjects (N) in each variable. It shows that the mean values of the loneliness variables (m = 92.51, SD = 13,214) and self-esteem variables (m = 124.80, SD = 12,980) with the internet addiction variable (m = 77.74, SD = 14,797). The range of data from the internet addiction, loneliness, and self-esteem are 46-109; 69-117; and 109-169.

The result of multiple regression analysis shows that the significance test is smaller than alpha (0.05), so it can be concluded that loneliness and self-esteem can predict the existence of adolescents who have internet addiction. The contribution of loneliness variable and self-esteem to internet addiction is seen from value F = 3.875, Mean square = 725.703, P = 0.031, R square = 0.195. Because R square = 0.195, so it can be interpreted that loneliness and self-esteem only contribute at 19.5% to internet addiction and 80.5% is donated from other variables that not be examined in this research. In table 2. the value of t-constant number is 4.109 and loneliness = -1.205 and self-esteem = -2.741.

Table 2 presents regression equation obtained in this group that is Y = 184.141 + (-0.610X). Besides, the analysis result also shows the result of the loneliness variable analysis and self-esteem separately to the internet addiction through t-test. The significance value of the self-esteem variable is 0.010 which is smaller than the alpha (0.05), while the significance value at loneliness is 0.237 which shows greater than alpha (0.05). Therefore, self-esteem can be used as a predictor of the internet addiction in adolescents, while loneliness cannot.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Internet Addiction</th>
<th>Loneliness</th>
<th>Self Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>77.74</td>
<td>92.51</td>
<td>124.80</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>14.797</td>
<td>13.214</td>
<td>12.980</td>
</tr>
<tr>
<td>Minimum</td>
<td>46</td>
<td>69</td>
<td>109</td>
</tr>
<tr>
<td>Maximum</td>
<td>109</td>
<td>117</td>
<td>169</td>
</tr>
</tbody>
</table>

Table II. COEFFICIENTS

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>184.141</td>
<td>44.816</td>
<td>4.109</td>
<td>0.000</td>
</tr>
<tr>
<td>Loneliness</td>
<td>-0.264</td>
<td>0.219</td>
<td>-1.205</td>
<td>0.237</td>
</tr>
<tr>
<td>Self esteem</td>
<td>-0.611</td>
<td>0.223</td>
<td>-2.741</td>
<td>0.010</td>
</tr>
</tbody>
</table>
B. Discussion

The results of the analysis through statistical regression shows that the hypothesis tested in this study are accepted. This shows that loneliness and self-esteem can be used as predictors of Internet addiction in adolescents. Based on the data obtained, the correlation coefficient between loneliness and self-esteem of internet addiction is 0.031, and the coefficient of determination or R square is 0.195. This figure indicates the contribution of the loneliness variable and self-esteem researched in this study amounted to 19.5% while the remaining 80.5% was contributed by other variables not examined in this study. This value alone can predict internet addiction without having to be lonely. This self-esteem indicates an average value (m = 124.80, SD = 12.980). This shows that in adolescents, the level of their self-esteem is low, so low self-esteem can predict internet addiction because self-esteem can describe feelings of meaning and security in adolescents so that adolescents are able to show themselves to others, how they behave and how considerate they are in their environment, but if they do not get it then they will experience low self-esteem [41].

In addition, the results obtained from the average value on loneliness are (m= 92.51, SD = 13.214). However, loneliness does not affect internet addiction in adolescents. It is because basically adolescents who are in loneliness could be caused by several factors namely a) the role of internal and external emotional regulations. Those are very important to adolescents’ development and adjustment because when a teenager get unpleasant things that affect his/her self-esteem, life satisfaction, and optimism, it is necessary to regulate and manage emotions and maintain themselves positively and reduce their loneliness by themselves (b) the existence of a positive self-concept, otherwise the adolescent has a negative self-concept and will tend to perceive themselves as bad and have no reliable ability, resulting in feelings of insecurity, lack of self-acceptance and usually low self-esteem. This suggests that adolescents could not form friendly friendships that could lead to loneliness [18], [29], [34], c) the quality of relationship with parents may reduce loneliness in adolescents. This is because adolescents need interpersonal closeness with their parents, show emotional and behavioral reactions. Adolescents who lose a figure from parents could feel lonely [10], [20], and d) social skills in adolescents could be linked to loneliness. Good social skills will reduce social loneliness [18].

IV. CONCLUSION

Based on the above analysis results, loneliness and self-esteem could together predict internet addiction in adolescents, but if both of them are separated, the results show that loneliness and internet addiction have no significant relationship. Self-esteem and internet addiction have a significant relationship especially for the adolescents who have low self-esteem. There are other factors that become predictors of internet addiction, such as self-control, depression, low life satisfaction level, so that the loneliness factor does not affect a person getting internet addiction.

Suggestion

There are two suggestions that would be given by the researchers. The first is for parents of adolescents. They must keep a good relationship with their children, so loneliness does not occur to the children, because one factor of loneliness that occurs to the children is relating to the parents’ role. The second is for further research. It is expected the further research to be made clearest in the methodological side by adding or observing other variables and other research subjects.

REFERENCES


